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President and Chief Executive Officer

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Kennecott

March 17, 1994

Mr. James Souby
Executive Director
Western Governors' Association
600 17th Street, Suite 1705 South Tower
Denver, CO 80202

Dear Mr. Souby:

I want to bring to your attention an issue which has the potential to threaten the viability of virtually every hardrock mine in the United States.

On January 18 of this year the U.S. Environmental Protection Agency (EPA) proposed to add two sites at Kennecott Utah Copper Corporation (KUCC) to the Superfund National Priorities (NPL) Listing. This action comes despite our massive, accelerated cleanup program which has been ongoing for the past two and a half years.

While most of the twenty areas identified for cleanup by Kennecott and EPA involve historic mine waste and date back to the turn of the century, the listing identified the Bingham Canyon Mine itself as a contaminant source for the following reasons:

1. The presence of metals from the naturally occurring orebody in water at the bottom of the pit. (The water is pumped out of the mine, utilized in the process, and ultimately discharged pursuant to a Utah NPDES permit.)
2. The fact that the pit, which is currently being mined, is not lined.

The idea that an active mine can be listed as a contaminant source because of the presence of metals, and the fact that it is unlined is not only absurd, but inconsistent with the original intent of the Superfund program and contrary to EPA's own definition of "source". It also has the potential to set a precedent that could apply to any hardrock mine in the country.

It is worth mentioning that EPA took the unprecedented step of listing a total of 89 "potential sources" at the north and south areas of our Utah Copper property, but did not substantiate the existence of these "potential sources" or even that any hazardous substances are present.

EPA/NPL Listing
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Kennecott's ongoing cleanup program is addressing historic waste sites faster, better, and cheaper than EPA's Superfund program. Many of the "source areas" listed in EPA's scoring package have already been cleaned up and some are sites where the regulatory agencies had earlier recommended no further action. In addition, at least two of the "source areas" identified by EPA are facilities operated under federally delegated programs, such as the Clean Air and Clean Water Acts. The added layer of Superfund bureaucracy on top of the existing federal programs (not to mention state programs) will only serve to slow down the cleanup and make it considerably more expensive.

I have enclosed for your information a copy of the scoring document which specifically deals with the listing of the Bingham Canyon Mine, as well as a copy of the Federal Register notice explaining how to submit comments on EPA's proposal.

The January 18th Federal Register proposal triggered a 60-day public review and comment period. Although the company asked for a 90-day extension of this public comment period, EPA granted only a 30-day extension. Therefore, if you are inclined to participate in this public process, written comments must now be submitted to EPA by April 20, 1994.

Complete scoring packages are available at EPA Headquarters in Washington D.C. and EPA Region VIII in Denver, Colorado. A set of references is available at Kennecott Corporation and we are willing to provide you access to those documents at our office in Salt Lake City.

The implications of EPA's proposal are very disturbing. Kennecott is vigorously opposing the proposed NPL listing. To help ensure the viability of the United States mining industry, I hope you will join us in this effort.

If you have any further questions regarding this issue, please contact Alexis Fernandez at (801) 322-8036.

Sincerely,


Bob E. Cooper

BEC/jhl
Attachment

each place it appears and adding "Copyright Office".

§ 259.4 [Amended]

37. Section 259.4 is amended by removing "Copyright Royalty Tribunal" each place it appears and adding "Copyright Office".

§ 259.5 [Amended]

38. Section 259.5 is amended by removing "Copyright Royalty Tribunal" each place it appears and adding "Copyright Office".

§ 259.5b [Amended]

39. Section 259.5(b) is amended by removing "1825 Connecticut Avenue, NW., suite 918, Washington, DC 20009" and adding "Copyright Office, see § 251.1".

§ 259.6 [Removed]

40. Section 259.6 is removed.

Dated: January 11, 1994.

Barbara A. Ringer,
Acting Register of Copyrights.

James H. Billington,
The Librarian of Congress.

[FR Doc. 94-1199 Filed 1-14-94; 8:45 am]

BILLING CODE 1410-02-M

**ENVIRONMENTAL PROTECTION
AGENCY**

40 CFR Part 300

[FRL-4827-5]

**National Priorities List for Uncontrolled
Hazardous Waste Sites, Proposed Rule
No. 16**

AGENCY: Environmental Protection
Agency.

ACTION: Proposed rule.

SUMMARY: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "the Act"), as amended, requires that the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP") include a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. The National Priorities List ("NPL") constitutes this list.

The Environmental Protection Agency ("EPA") proposes to add new sites to the NPL. This 16th proposed revision to the NPL includes 16 sites in the General Superfund Section and 10 in the Federal Facilities Section. The identification of a site for the NPL is intended primarily to guide EPA in determining which sites warrant further investigation to assess

the nature and extent of public health and environmental risks associated with the site and to determine what CERCLA-financed remedial action(s), if any, may be appropriate. This action does not affect the 1,192 sites currently listed on the NPL (1,069 in the General Superfund Section and 123 in the Federal Facilities Section). However, it does increase the number of proposed sites to 97 (67 in the General Superfund Section and 30 in the Federal Facilities Section). Final and proposed sites now total 1,289.

DATES: Comments must be submitted on or before February 17, 1994, for Raymark Industries, Inc. (Stratford, Connecticut), Lower Ecorse Creek Dump (Wyandotte, Michigan) and Tennessee Products (Chattanooga, Tennessee) since these are sites being proposed based on ATSDR health advisory criteria and present immediate concerns. For the remaining sites in this proposal, comments must be submitted on or before March 21, 1994.

ADDRESSES: Mail original and three copies of comments (no facsimiles or tapes) to Docket Coordinator, Headquarters; U.S. EPA CERCLA Docket Office; 5201; Waterside Mall; 401 M Street, SW.; Washington, DC 20460; 202/260-3046. For additional Docket addresses and further details on their contents, see Section I of the SUPPLEMENTARY INFORMATION portion of this preamble.

FOR FURTHER INFORMATION CONTACT: Terry Keidan, Hazardous Site Evaluation Division, Office of Emergency and Remedial Response (5204G), U.S. Environmental Protection Agency, 401 M Street, SW Washington, DC 20460, or the Superfund Hotline, Phone (800) 424-9346 or (703) 412-9810 in the Washington, DC, metropolitan area.

SUPPLEMENTARY INFORMATION:

- I. Introduction
- II. Purpose and Implementation of the NPL
- III. Contents of This Proposed Rule
- IV. Regulatory Impact Analysis
- V. Regulatory Flexibility Act Analysis

I. Introduction

Background

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601-9675 ("CERCLA" or "the Act") in response to the dangers of uncontrolled hazardous waste sites. CERCLA was amended on October 17, 1986, by the Superfund Amendments and Reauthorization Act ("SARA"), Public Law No. 99-499, 100 stat. 1613 et seq. To implement CERCLA, the Environmental Protection Agency

("EPA" or "the Agency") promulgated the revised National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 CFR part 300, on July 16, 1982 (47 FR 31180), pursuant to CERCLA section 105 and Executive Order 12316 (46 FR 42237, August 20, 1981). The NCP sets forth the guidelines and procedures needed to respond under CERCLA to releases and threatened releases of hazardous substances, pollutants, or contaminants. EPA has revised the NCP on several occasions, most recently on March 8, 1990 (55 FR 8666).

Section 105(a)(8)(A) of CERCLA requires that the NCP include "criteria for determining priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action." As defined in CERCLA section 101(24), remedial action tends to be long-term in nature and involves response actions that are consistent with a permanent remedy for a release.

Mechanisms for determining priorities for possible remedial actions financed by the Trust Fund established under CERCLA (commonly referred to as the "Superfund") and financed by other persons are included in the NCP in 40 CFR 300.425(c) (55 FR 8845, March 8, 1990). Under 40 CFR 300.425(c)(1), a site may be included on the NPL if it scores sufficiently high on the Hazard Ranking System ("HRS"), which is appendix A of 40 CFR part 300. On December 14, 1990 (55 FR 51532), EPA promulgated revisions to the HRS partly in response to CERCLA section 105(c), added by SARA. The revised HRS evaluates four pathways: ground water, surface water, soil exposure, and air. The HRS serves as a screening device to evaluate the relative potential of uncontrolled hazardous substances, pollutants, and contaminants to pose a threat to human health or the environment. Those sites that score 28.50 or greater on the HRS are eligible for the NPL.

Under a second mechanism for adding sites to the NPL, each State may designate a single site as its top priority, regardless of the HRS score. This mechanism, provided by the NCP in 40 CFR 300.425(c)(2), requires that, to the extent practicable, the NPL include within the 100 highest priorities, one facility designated by each State representing the greatest danger to public health, welfare, or the environment among known facilities in the State.

The third mechanism for listing, included in the NCP in 40 CFR 300.425(c)(3), allows certain sites to be listed whether or not they score above

28.50, if all of the following conditions are met:

- The Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Public Health Service has issued a health advisory that recommends dissociation of individuals from the release.

- EPA determines that the release poses a significant threat to public health.

- EPA anticipates that it will be more cost-effective to use its remedial authority than to use its removal authority to respond to the release.

Based on these criteria, and pursuant to section 105(a)(8)(B) of CERCLA, as amended by SARA, EPA promulgates a list of national priorities among the known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. That list, which is appendix B of 40 CFR part 300, is the National Priorities List ("NPL"). CERCLA section 105(a)(8)(B) defines the NPL as a list of "releases" and as a list of the highest priority "facilities." The discussion below may refer to the "releases or threatened releases" that are included on the NPL interchangeably as "releases," "facilities," or "sites." CERCLA section 105(a)(8)(B) also requires that the NPL be revised at least annually. A site may undergo CERCLA-financed remedial action only after it is placed on the NPL, as provided in the NCP in 40 CFR 300.425(b)(1).

EPA promulgated an original NPL of 406 sites on September 8, 1983 (48 FR 40658). The NPL has been expanded since then, most recently on October 14, 1992 (57 FR 47180).

The NPL includes two sections, one of sites being evaluated and cleaned up by EPA (the "General Superfund Section"), and one of sites being addressed by other Federal agencies (the "Federal Facilities Section"). Under Executive Order 12580 and CERCLA section 120, each Federal agency is responsible for carrying out most response actions at facilities under its own jurisdiction, custody, or control, although EPA is responsible for preparing an HRS score and determining if the facility is placed on the NPL. EPA is not the lead agency at these sites, and its role at such sites is accordingly less extensive than at other sites. The Federal Facilities Section includes those facilities at which EPA is not the lead agency.

Deletions/Cleanups

EPA may delete sites from the NPL where no further response is appropriate under Superfund, as explained in the NCP in 40 CFR 300.425(e) (55 FR 8845, March 8, 1990).

To date, the Agency has deleted 56 sites from the General Superfund Section of the NPL, most recently the Suffern Village Well Field, Village of Suffern, New York (58 FR 30989, May 28, 1993), Pesticide Lab, Yakima, Washington (58 FR 46087, September 1, 1993), LaBounty Site, Charles City, Iowa (58 FR 50218, October 6, 1993), Aidex Corporation, Council Bluffs, Iowa (58 FR 54297, October 21, 1993), Hydro-Flex Inc., Topeka, KS (58 FR 59369, November 9, 1993) and Plymouth Harbor/Cannon Engineering Corp., Plymouth, Massachusetts (58 FR 61029, November 19, 1993).

EPA also has developed an NPL construction completion list ("CCL") to simplify its system of categorizing sites and to better communicate the successful completion of cleanup activities (58 FR 12142, March 2, 1993). Sites qualify for the CCL when:

- (1) Any necessary physical construction is complete, whether or not final cleanup levels or other requirements have been achieved;
- (2) EPA has determined that the response action should be limited to measures that do not involve construction (e.g., institutional controls); or

- (3) The site qualifies for deletion from the NPL. Inclusion of a site on the CCL has no legal significance.

In addition to the 55 sites that have been deleted from the NPL because they have been cleaned up (the Waste Research and Reclamation site was deleted based on deferral to another program and is not considered cleaned up), an additional 162 sites are also in the NPL CCL, all but one from the General Superfund Section. Thus, as of October 1993, the CCL consists of 217 sites.

Cleanups at sites on the NPL do not reflect the total picture of Superfund accomplishments. As of September 30, 1993, EPA had conducted 591 removal actions at NPL sites, and 1,734 removal actions at non-NPL sites. Information on removals is available from the Superfund hotline.

Pursuant to the NCP in 40 CFR 300.425(c), this document proposes to add 26 sites to the NPL. The General Superfund Section includes 1,069 sites, and the Federal Facilities Section includes 123 sites, for a total of 1,192 sites on the NPL. Final and proposed sites now total 1,289. These numbers reflect EPA's decision to voluntarily remove the Hexcel Corporation site, in Livermore, CA, from the NPL.

Public Comment Period

The documents that form the basis for EPA's evaluation and scoring of sites in

this rule, as well as the health advisories issued by ATSDR and documentation supporting the designation as a State top priority, where applicable, are contained in dockets located both at EPA Headquarters and in the appropriate Regional offices. The dockets are available for viewing, by appointment only, after the appearance of this rule. The hours of operation for the Headquarters docket are from 9 a.m. to 4 p.m., Monday through Friday excluding Federal holidays. Please contact individual Regional dockets for hours.

Docket Coordinator, Headquarters, USEPA
CERCLA Docket Office, 5201 Waterside
Mall, 401 M Street, SW., Washington, DC
20460, 202/260-3046

Ellen Culhane, Region 1, USEPA, Waste
Management Records Center, HES-CAN 6,
J.F. Kennedy Federal Building, Boston, MA
02203-2211, 617/573-5729.

Ben Conetta, Region 2, USEPA, 26 Federal
Plaza, 7th Floor, Room 740, New York, NY
10278, 212/264-6696

Diane McCreary, Region 3, USEPA Library,
3rd Floor, 841 Chestnut Building, 9th &
Chestnut Streets, Philadelphia, PA 19107,
215/597-7904

Kathy Piselli, Region 4, USEPA, 345
Courtland Street, NE, Atlanta, GA 30365,
404/347-4216

Cathy Freeman, Region 5, USEPA, Records
Center, Waste Management Division 7-J,
Metcalfe Federal Building, 77 West Jackson
Boulevard, Chicago, IL 60604, 312/886-
6214

Bart Canellas, Region 6, USEPA, 1445 Ross
Avenue, Mail Code 6H-MA, Dallas, TX
75202-2733, 214/655-6740

Steven Wyman, Region 7, USEPA Library,
726 Minnesota Avenue, Kansas City, KS
66101, 913/551-7241

Greg Oberley, Region 8, USEPA, 999 18th
Street, Suite 500, Denver, CO 80202-2466,
303/294-7598

Lisa Nelson, Region 9, USEPA, 75 Hawthorne
Street, San Francisco, CA 94105, 415/744-
2347

David Bennett, Region 10, USEPA, 11th
Floor, 1200 6th Avenue, Mail Stop HW-
114, Seattle, WA 98101, 206/553-2103.

With the exception of Raymark Industries, Inc. (Stratford, Connecticut), Lower Ecorse Creek Dump (Wyandotte, Michigan), and Tennessee Products (Chattanooga, Tennessee) which are sites being proposed based on the ATSDR health advisory criteria, and Boomsnub/Airco (Vancouver, Washington) which has been designated as a State top priority, the Headquarters docket for this rule contains HRS score sheets for each proposed site; a Documentation Record for each site describing the information used to compute the score; pertinent information for any site affected by particular statutory requirements or EPA listing policies; and a list of documents referenced in the Documentation

Record. Each Regional docket for this rule, except for the three ATSDR health advisory sites and the State top priority mentioned above, contains all of the information in the Headquarters docket for sites in that Region, plus the actual reference documents containing the data principally relied upon and cited by EPA in calculating or evaluating the HRS scores for sites in that Region. These reference documents are available only in the Regional dockets. For the three sites proposed on the basis of health advisory criteria, both the Headquarters and Regional dockets contain the public health advisories issued by ATSDR, and EPA memoranda supporting the findings that in each case the release poses a significant threat to public health and that it would be more cost-effective to use remedial rather than removal authorities at the site. For the site that has been designated a top priority by the State, both the Headquarters and Regional dockets contain supporting documentation. Interested parties may view documents, by appointment only, in the Headquarters or the appropriate Regional docket or copies may be requested from the Headquarters or appropriate Regional docket. An informal written request, rather than a formal request under the Freedom of Information Act, should be the ordinary procedure for obtaining copies of any of these documents.

EPA considers all comments received during the comment period. During the comment period, comments are placed in the Headquarters docket and are available to the public on an "as received" basis. A complete set of comments will be available for viewing in the Regional docket approximately one week after the formal comment period closes. Comments received after the comment period closes will be available in the Headquarters docket and in the Regional docket on an "as received" basis.

Comments that include complex or voluminous reports, or materials prepared for purposes other than HRS scoring, should point out the specific information that EPA should consider and how it affects individual HRS factor values. See *Northside Sanitary Landfill v. Thomas*, 849 F.2d 1516 (D.C. Cir. 1988). EPA will make final listing decision after considering the relevant comments received during the comment period.

In past rules, EPA has attempted to respond to late comments, or when that was not practicable, to read all late comments and address those that brought to the Agency's attention a fundamental error in the scoring of a

site. (See, most recently, 57 FR 4824 (February 7, 1992)). Although EPA intends to pursue the same policy with sites in this rule, EPA can guarantee that it will consider only those comments postmarked by the close of the formal comment period. EPA cannot delay a final listing decision solely to accommodate consideration of late comments.

In certain instances, interested parties have written to EPA concerning sites which were not at that time proposed to the NPL. If those sites are later proposed to the NPL, parties should review their earlier concerns and, if still appropriate, resubmit those concerns for consideration during the formal comment period. Site-specific correspondence received prior to the period of formal proposal and comment will not generally be included in the docket.

II. Purpose and Implementation of the NPL

Purpose

The legislative history of CERCLA (Report of the Committee on Environment and Public Works, Senate Report No. 96-848, 96th Cong., 2d Sess. 60 (1980)) states the primary purpose of the NPL:

The priority lists serve primarily informational purposes, identifying for the States and the public those facilities and sites or other releases which appear to warrant remedial actions. Inclusion of a facility or site on the list does not in itself reflect a judgment of the activities of its owner or operator, it does not require those persons to undertake any action, nor does it assign liability to any person. Subsequent government action in the form of remedial actions or enforcement actions will be necessary in order to do so, and these actions will be attended by all appropriate procedural safeguards.

The purpose of the NPL, therefore, is primarily to serve as an informational and management tool. The identification of a site for the NPL is intended primarily to guide EPA in determining which sites warrant further investigation to assess the nature and extent of the public health and environmental risks associated with the site and to determine what CERCLA remedial action(s), if any, may be appropriate. The NPL also serves to notify the public of sites that EPA believes warrant further investigation. Finally, listing a site may, to the extent potentially responsible parties are identifiable at the time of listing, serve as notice to such parties that the Agency may initiate CERCLA-financed remedial action.

Implementation

After initial discovery of a site at which a release or threatened release may exist, EPA begins a series of increasingly complex evaluations. The first step, the Preliminary Assessment ("PA"), is a low-cost review of existing information to determine if the site poses a threat to public health or the environment. If the site presents a serious imminent threat, EPA may take immediate removal action. If the PA shows that the site presents a threat but not an imminent threat, EPA will generally perform a more extensive study called the Site Inspection ("SI"). The SI involves collecting additional information to better understand the extent of the problem at the site, screen out sites that will not qualify for the NPL, and obtain data necessary to calculate an HRS score for sites which warrant placement on the NPL and further study. EPA may perform removal actions at any time during the process. To date EPA has completed approximately 35,000 PAs and approximately 17,000 SIs.

The NCP in 40 CFR 300.425(b)(1) (55 FR 8845, March 8, 1990) limits expenditure of the Trust Fund for remedial actions to sites on the NPL. However, EPA may take enforcement actions under CERCLA or other applicable statutes against responsible parties regardless of whether the site is on the NPL, although, as a practical matter, the focus of EPA's CERCLA enforcement actions has been and will continue to be on NPL sites. Similarly, in the case of CERCLA removal actions, EPA has the authority to act at any site, whether listed or not, that meets the criteria of the NCP in 40 CFR 300.415(b)(2) (55 FR 8842, March 8, 1990). EPA's policy is to pursue cleanup of NPL sites using all the appropriate response and/or enforcement actions available to the Agency, including authorities other than CERCLA. The Agency will decide on a site-by-site basis whether to take enforcement or other action under CERCLA or other authorities prior to undertaking response action, proceed directly with Trust Fund-financed response actions and seek to recover response costs after cleanup, or do both. To the extent feasible, once sites are on the NPL, EPA will determine high-priority candidates for CERCLA-financed response action and/or enforcement action through both State and Federal initiatives. EPA will take into account which approach is more likely to accomplish cleanup of the site most expeditiously while using CERCLA's limited resources as efficiently as possible.

Although the ranking of sites by HRS scores is considered, it does not, by itself, determine the sequence in which EPA funds remedial response actions, since the information collected to develop HRS scores is not sufficient to determine either the extent of contamination or the appropriate response for a particular site (40 CFR 300.425(b)(2), 55 FR 8845, March 8, 1990). Additionally, resource constraints may preclude EPA from evaluating all HRS pathways; only those presenting significant risk or sufficient to make a site eligible for the NPL may be evaluated. Moreover, the sites with the highest scores do not necessarily come to the Agency's attention first, so that addressing sites strictly on the basis of ranking would in some cases require stopping work at sites where it was already underway.

More detailed studies of a site are undertaken in the Remedial Investigation/Feasibility Study ("RI/FS") that typically follows listing. The purpose of the RI/FS is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy (40 CFR 300.430(a)(2) (55 FR 8846, March 8, 1990)). It takes into account the amount of hazardous substances, pollutants or contaminants released into the environment, the risk to affected populations and environment, the cost to remediate contamination at the site, and the response actions that have been taken by potentially responsible parties or others. Decisions on the type and extent of response action to be taken at these sites are made in accordance with 40 CFR 300.415 (55 FR 8842, March 8, 1990) and 40 CFR 300.430 (55 FR 8846, March 8, 1990). After conducting these additional studies, EPA may conclude that initiating a CERCLA remedial action using the Trust Fund at some sites on the NPL is not appropriate because of more pressing needs at other sites, or because a private party cleanup is already underway pursuant to an enforcement action. Given the limited resources available in the Trust Fund, the Agency must carefully balance the relative needs for response at the numerous sites it has studied. It is also possible that EPA will conclude after further analysis that the site does not warrant remedial action.

RI/FS at Proposed Sites

An RI/FS may be performed at sites proposed in the Federal Register for placement on the NPL (or even sites that have not been proposed for placement on the NPL) pursuant to the Agency's removal authority under CERCLA, as outlined in the NCP in 40 CFR 300.415. Although an RI/FS generally is

conducted at a site after it has been placed on the NPL, in a number of circumstances the Agency elects to conduct an RI/FS at a site proposed for placement on the NPL in preparation for a possible Trust Fund-financed remedial action, such as when the Agency believes that a delay may create unnecessary risks to public health or the environment. In addition, the Agency may conduct an RI/FS to assist in determining whether to conduct a removal or enforcement action at a site.

Facility (Site) Boundaries

The purpose of the NPL is merely to identify releases or threatened releases of hazardous substances that are priorities for further evaluation. The Agency believes that it would be neither feasible nor consistent with this limited purpose for the NPL to attempt to describe releases in precise geographical terms. The term "facility" is broadly defined in CERCLA to include any area where a hazardous substance has "come to be located" (CERCLA section 101(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names are provided for general identification purposes only. Knowledge of the geographic extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

Because the NPL does not assign liability or define the geographic extent of a release, a listing need not be amended if further research into the contamination at a site reveals new information as to its extent. This is further explained in preambles to past NPL rules, most recently February 11, 1991 (56 FR 5598).

Limitations on Payment of Claims for Response Actions

Sections 111(a)(2) and 122(b)(1) of CERCLA authorize the Fund to reimburse certain parties for necessary costs of performing a response action. As is described in more detail at 58 FR 5460 (January 21, 1993), 40 CFR part 307, there are two major limitations placed on the payment of claims for response actions. First, only private parties, certain potentially responsible parties (including States and political subdivisions), and certain foreign entities are eligible to file such claims. Second, all response actions under sections 111(a)(2) and 122(b)(1) must receive prior approval, or "preauthorization," from EPA.

III. Contents of This Proposed Rule

Table 1 identifies the 16 NPL sites in the General Superfund Section and

Table 2 identifies the 10 NPL sites in the Federal Facilities Section being proposed in this rule. Both tables follow this preamble. With the exception of Raymark Industries, Inc. (Stratford, Connecticut), Lower Ecorse Creek Dump (Wyandotte, Michigan), and Tennessee Products (Chattanooga, Tennessee) which are sites being proposed based on ATSDR health advisory criteria, and Boomsnub/Airco (Vancouver, Washington) which has been designated as a State top priority, all sites are proposed based on HRS scores of 28.50 or above. The sites in Table 1 are listed alphabetically by State, for ease of identification, with group number identified to provide an indication of relative ranking. To determine group number, sites on the NPL are placed in groups of 50; for example, a site in Group 4 of this proposal has a score that falls within the range of scores covered by the fourth group of 50 sites on the General Superfund Section of the NPL. Sites in the Federal Facilities Section are also presented by group number based on groups of 50 sites in the General Superfund Section.

Statutory Requirements

CERCLA section 105(a)(8)(B) directs EPA to list priority sites "among" the known releases or threatened releases of hazardous substances, pollutants, or contaminants, and section 105(a)(8)(A) directs EPA to consider certain enumerated and "other appropriate" factors in doing so. Thus, as a matter of policy, EPA has the discretion not to use CERCLA to respond to certain types of releases. Where other authorities exist, placing sites on the NPL for possible remedial action under CERCLA may not be appropriate. Therefore, EPA has chosen not to place certain types of sites on the NPL even though CERCLA does not exclude such action. If, however, the Agency later determines that sites not listed as a matter of policy are not being properly responded to, the Agency may place them on the NPL.

The listing policies and statutory requirements of relevance to this proposed rule cover sites subject to the Resource Conservation and Recovery Act ("RCRA") (42 U.S.C. 6901-6991i) and Federal facility sites. These policies and requirements are explained below and have been explained in greater detail in previous rulemakings (56 FR 5598, February 11, 1991).

Releases From Resource Conservation and Recovery Act (RCRA) Sites

EPA's policy is that non-Federal sites subject to RCRA Subtitle C corrective action authorities will not, in general, be placed on the NPL. However, EPA will

list certain categories of RCRA sites subject to Subtitle C corrective action authorities, as well as other sites subject to those authorities, if the Agency concludes that doing so best furthers the aims of the NPL/RCRA policy and the CERCLA program. EPA has explained these policies in detail in the past (51 FR 21054, June 10, 1986; 53 FR 23978, June 24, 1988; 54 FR 41000, October 4, 1989; 56 FR 5602, February 11, 1991).

Consistent with EPA's NPL/RCRA policy, EPA is proposing to add one site to the General Superfund Section of the NPL that may be subject to RCRA Subtitle C corrective action authorities, the Raymark Industries, Inc. site in Stratford, Connecticut, which is being proposed based on ATSDR health advisory criteria. Material has been placed in the public docket establishing that the facility operated as a hazardous waste generator and land disposal facility. Raymark Industries, Inc. is a RCRA Subtitle C regulated facility which has initiated bankruptcy proceedings. Listing of the Raymark Industries, Inc. site on the NPL under these circumstances is consistent with EPA's NPL/RCRA deferral policy.

Releases From Federal Facility Sites

On March 13, 1989 (54 FR 10520), the Agency announced a policy for placing Federal facility sites on the NPL if they meet the eligibility criteria (e.g., an HRS score of 28.50 or greater), even if the Federal facility also is subject to the corrective action authorities of RCRA Subtitle C. In that way, those sites could be cleaned up under CERCLA, if appropriate.

This rule proposes to add ten sites to the Federal Facilities Section of the NPL.

ATSDR Health Advisory Based Proposed Sites

Raymark Industries, Inc. in Stratford, Connecticut, Lower Ecorse Creek Dump in Wyandotte, Michigan, and Tennessee Products in Chattanooga, Tennessee, are being proposed for the NPL on the basis of section 425(c)(3) of the NCP, 40 CFR 300.425(c)(3) (55 FR 8845, March 8, 1990).

Raymark Industries, Inc.

The Raymark Industries, Inc. site includes the Raymark Industries, Inc. facility and other locations where Raymark Industries, Inc. facility waste has come to be located and that EPA determines pose a significant threat to public health. The Raymark Industries, Inc. facility comprises about 500,000 square feet of office, storage and production space on 33.4 acres next to Interstate Route 95. A public recreation

park containing a baseball diamond and recreation field is located immediately northwest of the site. The facility began operations at this location in 1919 and primarily manufactured asbestos brake linings and other automotive asbestos products until operations ceased in 1989. The facility operated as a hazardous waste generator and land disposal facility. The hazardous waste produced on-site consisted primarily of lead-asbestos dust, metals and solvents. From 1919 to July 1984, Raymark Industries, Inc. used a system of lagoons to attempt to capture the waste lead and asbestos dust produced by its manufacturing process. Over this 65 year period, these lagoon systems were located throughout the western and central areas of the facility. As the lagoons filled with sludge they were covered with asphalt and often built upon. Dredged materials were also landfilled at other locations, including the adjacent ballfield. Interim actions intended to stabilize waste have been conducted at the Raymark Industries, Inc. facility and the ballfield.

An intensive surficial sampling program of the other locations where waste from Raymark Industries, Inc. is known or suspected to have been received and used as fill was instituted by the Connecticut Department of Environmental Protection and EPA in April 1993. Based upon the analytical results of this activity, which indicated concentrations of lead, asbestos, and polychlorinated biphenyls (PCBs), ATSDR issued a public health advisory on May 26, 1993 for "Raymark Industries/Stratford Asbestos Sites". The advisory recommended dissociation of the public from areas where exposure to Raymark Industries, Inc. waste at levels of health concern can occur. The presence of dioxin in Raymark Industries, Inc. waste has subsequently been confirmed. The advisory was based on the concern that people could be exposed to site-related contaminants through inhalation, direct dermal contact, ingestion of waste present in the soil, and consumption of potentially contaminated area seafood.

The results from samples collected to determine the lateral extent of contamination at known disposal locations has served as the basis for supplemental ATSDR site-specific Health Consultations. ATSDR recommended immediate response actions based upon the finding of imminent health threats. Sampling to determine the vertical extent of contamination at these disposal areas is presently being conducted to expedite complete site characterization. Site characterization and initiation of

mitigation actions at known locations and at newly discovered sites are being prioritized for early action.

EPA's assessment is that the site poses a significant threat to human health and anticipates that it will be more cost-effective to use remedial authority than to use removal authority to respond to the site. This finding is set out in a memorandum dated November 3, 1993, from Merrill S. Hohman, Region 1 Waste Management Division Director, to Larry Reed, Hazardous Site Evaluation Division Director. This memorandum and the ATSDR advisory are available in the Superfund docket for this proposed rule. Based on this information, and the references in support of proposal, EPA believes that the Raymark Industries, Inc. site is appropriate for the NPL pursuant to 40 CFR 300.425(c)(3).

Lower Ecorse Creek Dump

The Lower Ecorse Creek Dump site is located in Wyandotte, Wayne County, Michigan. The site consists of the residence at 470 North Drive and three neighboring parcels of land. The site occupies a level area with the back of the lots abutting the Ecorse River. During the period between 1945 and 1955, and prior to the house at 470 North Drive being built, the low lying swampy area of the creek was filled with material from local industries. Some of the fill material contained what has been confirmed as ferric ferrocyanide, commonly referred to as "Prussian Blue". The blue soil was also found across the street at 471 North Drive, approximately two feet below the surface and the owner of the residence at 469 North Drive also reported that he found the blue soil in his yard. In addition, there are two vacant lots east of 470 North Drive where Prussian Blue is exposed. Neighborhood children have used portions of these lots as a go-cart track and wearing of the topsoil by the go-carts has exposed the Prussian Blue.

The EPA was contacted by the Wayne County Health Department on October 25, 1989. EPA tasked its Technical Assistance Team (TAT) on October 27, 1989, to conduct a site investigation and sampling. Sampling results were provided to ATSDR for review and assessment. ATSDR's review on November 22, 1989, concluded that "The levels of cyanide found in the soil do present an urgent public health threat. Steps to eliminate any direct contact with the contaminated soil need to be taken immediately."

Following ATSDR's determination that the presence of cyanide-contaminated wastes in an unrestricted residential area presented an immediate and significant public health threat,

EPA's Emergency Response Branch initiated removal activities. On December 4, 1989, work commenced to cover the contaminated areas with six inches of clean topsoil and fill in areas of the driveway and sidewalk which had been previously excavated by the property owner. This action eliminated physical contact with Prussian Blue and related cyanide compounds which had spread throughout the area. The initial action was completed in the summer of 1990 with the establishment of a vegetative cover.

The Final ATSDR Health Advisory which was released on August 13, 1993, recommended the following actions:

(1) Immediately dissociate the affected residents from cyanide contamination, which is at levels of health concern in residential subsurface soils;

(2) Implement permanent measures to remediate the contamination as appropriate; and

(3) Consider including the Lower Ecorse Creek Dump site on the EPA National Priorities List or, using other statutory or regulatory authorities as appropriate, take other steps to characterize the site and take necessary action.

Additional recommendations by ATSDR include conducting a door-to-door well survey and well sampling to determine the extent and level of any groundwater contamination. ATSDR also suggests restricting digging into contaminated subsurface soil to prevent human contact with contaminated soils and released cyanide gas.

EPA's assessment is that the site poses a significant threat to human health and anticipates that it will be more cost-effective to use remedial authority than to use removal authority to respond to the site considering the costs and time involved in an extensive groundwater study and potential groundwater remediation. This finding is set out in a memorandum dated August 30, 1993, from William E. Munro, Region 5 Waste Management Division Director, to Larry Reed, Hazardous Site Evaluation Division Director. This memorandum and the ATSDR advisory are available in the Superfund docket for this proposed rule. Based on this information, and the references in support of proposal, EPA believes that the Lower Ecorse Creek Dump site is appropriate for the NPL pursuant to 40 CFR 300.425(c)(3).

Tennessee Products

The Tennessee Products site, is an aggregation of Southern Coke Corporation (Southern Coke), Chattanooga Creek Tar Deposit Site and Hamill Road Dump No. 2. The site is

located in a heavily populated, low-income, urban and industrial area in the Chattanooga Creek (the creek) basin in Chattanooga, Hamilton County, Tennessee. The site consists of the former Tennessee Products coke plant and its associated uncontrolled coal-tar dumping grounds in Chattanooga Creek and its floodplain. Uncontrolled dumping of coal-tar wastes has contaminated the facility, groundwater resources underlying the facility, and surface water resources downstream of the facility including wetlands and fisheries.

The former Tennessee Products coke plant (a.k.a. Southern Coke) is located at 4800 Central Avenue, south of Hamill/ Hooker Road and approximately one mile west of the creek. The coal-tar wastes are located along an approximate 2.5 mile section of the creek extending from just upstream of Hamill Road bridge to the creek's confluence with Dobbs Branch. The coal-tar deposits are the result of dumping coal-tar wastes directly into the creek and onto the floodplain within the immediate vicinity of the creek channel. The largest coal-tar deposits have been found in the creek bed and along its banks within a 1 mile segment of the creek between Hamill Road and 38th Street. Analyses for polynuclear aromatic hydrocarbons (PAHs) as well as visual inspection of sediment cores confirm that coal-tar has heavily contaminated this segment of the creek plus an additional 1.5 miles of the creek downstream from this segment.

ATSDR issued a Public Health Advisory for the Tennessee Products Site on August 20, 1993, based on the chemical and physical hazard presented by the coal-tar deposits at the site. The Advisory recommends the following actions:

(1) Dissociate residents from the coal-tar deposits;

(2) Continue site characterization to address the potential for migration of contaminants;

(3) Consider the Tennessee Products Site for inclusion on the NPL;

(4) As appropriate, consider other coal-tar contaminated sites along the creek for inclusion on the NPL.

Studies have been conducted on Chattanooga Creek on several occasions by EPA and other agencies since 1973. Several of these studies indicate that coal-tar constituents have contaminated the creek and its sediments. The latest of these studies, conducted in 1992 by EPA, has revealed the extent of the coal-tar dumping along the creek. This new information, in combination with historical file information, supports the aggregation of the above mentioned

sites. The aggregation criteria is discussed in a memo to the file, from Lofton Carr, Site Assessment Manager, EPA Region 4, dated June 8, 1993, which is included in the nomination package.

Historical sampling and aerial photographic evidence indicate that the tar was dumped into the creek, on the banks and in areas near the creek over several years during the 1940s and 1950s. During World War II, the U.S. Government purchased the Tennessee Products facility and operated it for the war effort. The facility was sold back to the company after the end of the war. Due to increased coke production during the war, a substantial increase in waste generated by Tennessee Products may have strained waste handling procedures practiced by Tennessee Products before 1941. Documentation of the disposal practices of Tennessee Products during this time period is not available; however, Tennessee Products maintained a private sewer line which discharged directly into the creek.

EPA's assessment is that the site poses a significant threat to human health and anticipates that it will be more cost-effective to use remedial authority than to use removal authority to respond to the site. This finding is set out in a memorandum dated August 17, 1993, from Joseph R. Franzmathes, Region 4 Waste Management Division Director, to Larry Reed, Hazardous Site Evaluation Division Director. This memorandum and the ATSDR advisory are available in the Superfund docket for this proposed rule. Based on this information, and the references in support of proposal, EPA believes that the Tennessee Products site is appropriate for the NPL pursuant to 40 CFR 300.425(c)(3).

Name Change

EPA is proposing to change the name of the Schofield Barracks site in Oahu, Hawaii, to Schofield Barracks/Wheeler Army Airfield. EPA believes the name change more accurately reflects the site.

IV. Regulatory Impact Analysis

Executive Order 12866

This action was submitted to the Office of Management and Budget (OMB) for review under Executive Order 12866 (58 FR 51735, October 4, 1993) and Executive Order 12580 (52 FR 2923, January 29, 1987). No changes were made in response to OMB.

V. Regulatory Flexibility Act Analysis

The Regulatory Flexibility Act of 1980 requires EPA to review the impacts of this action on small entities, or certify that the action will not have a

significant impact on a substantial number of small entities. By small entities, the Act refers to small businesses, small government jurisdictions, and nonprofit organizations.

While this rule proposes to revise the NCP, it is not a typical regulatory change since it does not automatically impose costs. As stated above, proposing sites to the NPL does not in itself require any action by any party, nor does it determine the liability of any party for the cost of cleanup at the site. Further, no identifiable groups are affected as a whole. As a consequence, impacts on any group are hard to predict. A site's proposed inclusion on

the NPL could increase the likelihood of adverse impacts on responsible parties (in the form of cleanup costs), but at this time EPA cannot identify the potentially affected businesses or estimate the number of small businesses that might also be affected.

The Agency does expect that placing the sites in this proposed rule on the NPL could significantly affect certain industries, or firms within industries, that have caused a proportionately high percentage of waste site problems. However, EPA does not expect the listing of these sites to have a significant economic impact on a substantial number of small businesses.

In any case, economic impacts would occur only through enforcement and

cost-recovery actions, which EPA takes at its discretion on a site-by-site basis. EPA considers many factors when determining enforcement actions, including not only the firm's contribution to the problem, but also its ability to pay.

The impacts (from cost recovery) on small governments and nonprofit organizations would be determined on a similar case-by-case basis.

For the foregoing reasons, I hereby certify that this proposed rule would not have a significant economic impact on a substantial number of small entities. Therefore, this proposed regulation does not require a regulatory flexibility analysis.

NATIONAL PRIORITIES LIST—PROPOSED RULE NO. 16—GENERAL SUPERFUND SECTION

[Number of Sites Proposed to General Superfund Section: 16]

State	Site name	City/county	NPL Gr ¹
CA	Frontier Fertilizer	Davis	14
CT	Raymark Industries, Inc.	Stratford	NA
FL	Chevron Chemical Co. (Ortho Division)	Orlando	4/5
IA	Mason City Coal Gasification Plant	Mason City	1
KS	Chemical Commodities Inc.	Olathe	4/5
LA	Lincoln Creosote	Bossier City	17
MI	Lower Ecorse Creek Dump	Wyandotte	NA
NY	GCL Tie and Treating Inc.	Village of Sidney ..	5
PA	East Tenth Street	Marcus Hook	4
TN	Chemet Co	Moscow	4/5
TN	Tennessee Products	Chattanooga	NA
UT	Kennecott (North Zone)	Magna	2
UT	Kennecott (South Zone)	Copperton	2
UT	Murray Smelter	Murray City	1
VI	Island Chemical Corp./Virgin Islands Chemical Corp.	St. Croix	4/5
WA	Boomsnub/Airco	Vancouver	NA

¹ Sites are placed in groups (Gr) corresponding to groups of 50 on the final NPL.

NATIONAL PRIORITIES LIST—PROPOSED RULE NO. 16—FEDERAL FACILITIES SECTION

[Number of Sites Proposed to Federal Facilities Section: 10]

State	Site name	City/county	NPL Gr ¹
CA	Laboratory for Energy-Related Health Research/Old Campus Landfill (USDOE)	Davis	4/5
FL	Whiting Field Naval Air Station	Milton	4/5
HI	Naval Computer and Telecommunications Area Master Station Eastern Pacific	Oahu	4/5
MD	Patuxent Naval Air Station	St. Mary's Co	4/5
MI	Wurtsmith Air Force Base	Iosco County	4/5
OH	Air Force Plant 85	Columbus	4/5
OH	Rickenbacker Air National Guard Base	Lockbourne	4/5
PA	Navy Ships Parts Control Center	Mechanicsburg	4/5
VA	Fort Eustis (US Army)	Newport News	4/5
WA	Old Navy Dump/Manchester Laboratory (USEPA/NOAA)	Kitsap County	4/5

¹ Sites are placed in groups (Gr) corresponding to groups of 50 on the final NPL.

List of Subjects in 40 CFR Part 300

Air pollution control, Chemicals, Hazardous materials, Intergovernmental relations, Natural resources, Oil pollution, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control, Water supply.

Authority: 42 U.S.C. 9605; 42 U.S.C. 9620; 33 U.S.C. 1321(c)(2); E.O. 11735, 3 CFR, 1971-1975 Comp., p. 793; E.O. 12580, 3 CFR, 1987 Comp., p. 193.

Dated: January 11, 1994.

Elliott P. Laws,
Assistant Administrator, Office of Solid Waste
and Emergency Response.

[FR Doc. 94-1146 Filed 1-14-94; 8:45 am]

BILLING CODE 6560-50-P

SOURCE DESCRIPTION

2.2 Source Characterization

Number of the source: 1

Name and description of the source: Kennecott Bingham (mine/pit)-

This active open pit copper mine, which developed from the early 1900s by consolidating numerous underground mining operations into an open pit enterprise, currently is estimated to cover some two square miles in area (Ref. 17 pg. 5 and 6, 29).

Location of the source, with reference to a map of the site:

The open pit is depicted in Figures 1 and 2 of the Documentation Record and is approximately four miles southwest of the town of Copperton, Utah, and it is established within the upper reaches of Bingham Canyon within the Oquirrh Mountains (Ref. 29 and 38).

Containment

Gas release to air

NE

Particulate release to air

Active mining operations are estimated to generate approximately 950 tons of dust per year (Ref. 11 pg. 11), but sprinkler systems are present which are used to assist in dust suppression and in leachate generation (Ref. 34).

Release to ground water

The open pit operation may be in contact with ground water at its center (although this may be run-off water accumulation also). The pit is not lined to prevent connection with local ground water. A series of cutoff walls established to bedrock east of the pit and alluvial ground water wells along Bingham Creek actively collect water for processing or disposal (although the efficiency of the current system is not known) (Ref. 1 Summary pgs. 4 and 5).

Release via overland migration and/or flood

The pit is established at the origin of Bingham Creek. The depth of the pit makes it improbable that run-off within the pit could escape the pit. In fact run-off water is collected and piped to an ore concentrating facility in Copperton (Ref. 34 and 38).

2.4.1 Hazardous Substances

<u>Hazardous substance</u>	<u>Evidence</u>	<u>Sample ID</u>	<u>Reference</u>
Chromium	Mean water samples obtained from pit water at the center of the pit were elevated in metal concentrations. The samples were obtained during a five year hydrogeologic study performed by Kennecott from 1983 to 1988. According to Kennecott, the water in the pit is high in "metals" since it intercepts the ore body (Ref. 16 pg. 16).	S237 (series)	16, App. C
Copper		S317 (series)	.
Lead		S400 (series)	.
Nickel			.
Selenium			.

2.4.2. Hazardous Waste Quantity

2.4.2.1.1. Hazardous Constituent Quantity

<u>Hazardous Substance</u>	Constituent Quantity (pounds) (Mass - S)	<u>Reference</u>
<p>There is not enough information available from samples that have been collected to estimate constituent quantity for this source area. The samples that are used to show hazardous substances that are present within this source area were collected from the water body at the bottom of the Bingham Canyon Mine and are not statistically representative of the concentrations of hazardous substances located throughout this source area (Refs. 16, 18).</p>		

sum:

(pounds)

Hazardous Constituent Quantity Value (S):



UNITED STATES
ENVIRONMENTAL PROTECTION
AGENCY

N 016-2-19-R8

NATIONAL PRIORITIES LIST NPL

QERR Hazardous Site Evaluation Division Washington, DC 20460

January 1994

KENNECOTT (NORTH ZONE) Magna, Utah

The Kennecott (North Zone) site is located near the south shore of the Great Salt Lake. Magna, the nearest town, has a population of approximately 17,800 people and is located south of the large Kennecott tailings pond. Salt Lake City is approximately 15 miles east of the tailings pond. The site covers a large area and sources of contamination include the 5,700 acre tailings pond, a slag pile, contaminated residential soils in the town of Magna, and the refinery evaporation pond.

Kennecott Copper Corp., which owns the site (excluding portions of Magna), has operated a wide variety of mineral processing and production facilities in the area since around 1900. The primary metal currently produced is copper, mined south of the site at Kennecott (South Zone), which is also being proposed to the NPL at this time.

Contaminants in the various sources include arsenic, chromium, copper, lead, selenium, and zinc. Analysis of ground water monitoring wells have found high levels of arsenic and selenium. The principal aquifer, which supplies water to the Magna municipal water system, underlies many of the sources at the site. In addition, surface water analysis near wetlands shows releases of copper to the ditch near the large tailings pond.

Current Kennecott activity in the North Zone site involves smelting and refining the concentrated copper ore that has been mined from the open pit approximately 20 miles south of the site.

Kennecott is conducting an investigation in the area near the smelter to determine the nature and extent of the contamination prior to constructing a new smelter.

[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]



UNITED STATES
ENVIRONMENTAL PROTECTION
AGENCY

OERR Hazardous Site Evaluation Division Washington, DC 20460

NPL-116-2-20-R8

NATIONAL PRIORITIES LIST NPL

January 1994

KENNECOTT (SOUTH ZONE) Copperton, Utah

The Kennecott (South Zone) site area is located in Salt Lake County, Utah. The Salt Lake City suburban area is located to the east and northeast of the site. While the pit and other ore extraction activities occur on the east slope of the Oquirrh Mountains, other sources extend to the east for at least six miles into the Salt Lake Valley. The site area covers approximately 37 square miles.

Mining in the area began in the 1860s, with copper being the primary metal produced. Various mining companies have operated in the district over the years, including ARCO Inc. (formerly Anaconda Co.) and Kennecott Copper Corp. Since around 1900, Kennecott has operated a wide variety of mineral processing and production facilities onsite. Kennecott sent much of the mineral processing waste and copper ore from these operations north to the Kennecott (North Zone). Tailings waste produced in the South Zone is shipped to the North Zone by slurry and rail.

The South Zone includes wastes associated with extracting and concentrating copper ore. The main sources identified at the South Zone are the open pit, Bingham Creek Channel, State Motorcycle Park, Lark Tailings, Butterfield Mine/St. Joe's Tunnel, Bingham Creek/Anaconda Tailings, Large Bingham Reservoir, Small Bingham Reservoir, Leach Dumps, Leachate Collection System, 80 Acre Evaporation Pond, 4000 West Evaporation Pond, South Evaporation Pond, and residential soils in West Jordan.

The largest source at the South Zone is the Leach Dumps, which cover 5,350 acres. Contaminants found in waste sources at the South Zone include arsenic, cadmium, chromium, copper, lead, nickel, selenium, silver, and zinc.

Many communities in the Salt Lake Valley use ground water for municipal water supplies. In the area of the sulfate plume identified by Kennecott reports, communities are precluded from using the resource. Concentrations of arsenic and cadmium have been found in two municipal wells and one domestic drinking water well. Chromium was also found in a domestic drinking water well. The municipal wells are no longer being used. A very large sulfate plume that originates from the Large Bingham Reservoir extends for miles in the Salt Lake Valley Principal Aquifer. Soil has been contaminated with tailings in residential areas within the city of West Jordan.

Kennecott is currently working and has performed or participated in cleanup work under EPA enforcement orders. Kennecott provided transportation and a repository for clean up of highly contaminated soils in West Jordan. Kennecott removed waste rock from Butterfield Canyon. Sludge and tailings have been removed from the Large and Small Bingham Reservoirs and are currently being regraded and lined. Kennecott is presently removing waste rock and tailings from the Lark area and Bingham Creek. ARCO is also participating in capping the Anaconda Tailings and removing contaminated sediments from Bingham Creek. In addition, Kennecott is undertaking many other projects that are not under EPA order or oversight.

[The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

1. Lead Mine Mill
2. Utah Copper Company Mill
3. Winnamuck Mill
4. Markham Mill
5. Wall's Mill
6. Shawmut Mill
7. Utah-Apex Mill
8. Roger's Mill
9. Boston Consolidated Mill
10. Stewart No. 2 Mill
11. Highland Boy Mill
12. Bingham-New Haven copper and Gold Company Mill
13. Columbia Copper Company Mill
14. Last Chance Mill
15. New England Gold and Copper Mill
16. Jordan Mill
17. Stewart Mill: - -
18. Spanish Mill
19. Telegraph Mill
20. Bemis Mill
21. West Mountain Mining Company Concentrator
22. Silver Shield Mill
23. Bingham Mining and Milling Company Mill
24. Utah Consolidated Gold Mine Mill
25. Bingham Gold Mining Company
26. Utah Concentrator
27. Heaston Concentrator Jigs
28. Massasoit Mill
29. Queen Mill
30. Utah Mill
31. Brooks Mill
32. Durrant Mill
33. Egan and Bates Mill
34. Bingham-New England Mill
35. Robbe Cells
36. Proler
37. Utah Smelter
38. Winnamuck Smelter
39. Revere Smelter
40. Yampa Smelter
41. Copperton Dumps
42. Ohio Copper Company Mills
43. Revere Mill
44. Fortune Mill
45. New Mammoth Mill
46. Dalton and Lark Mill
47. Masscotie Tunnel, Ditch and Pond
48. Anaconda Carr Fork
49. Starr Mill
50. Utah-Delaware Mill
51. International Mill
52. International Smelter
53. Water Supply Tunnel Dump
54. Barneys Canyon Gold Mine
55. Precipitation Plants in Copperton
56. Copperton Concentrator
57. Yellow Cake Plant
58. Trans Jordan Landfill
59. Sludge Farm
60. Dry Fork Dumps
61. Bluewater I Repository
62. Bluewater I North Repository
63. Midas Pond
64. Eastside Reservoir

LIST OF ADDITIONAL POTENTIAL SOURCES FOR THE KENNECOTT NORTH ZONE AREA

1. Smelter Stack Deposition Area
2. Magna Leaching Facility
3. Cobalt Leaching Facility
4. Arthur Mill (Arthur Concentrator)
5. Black Rock Tailings Pond
6. Last Chance Smelter Pond
7. Flue Dust Disposal Area
8. Railroad Flue Dust Area
9. Refinery Evaporation Ponds
10. Utah Copper Power Plant
11. Magna Concentrator (Garfield Concentrator, North Concentrator)
12. Bonneville Crusher
13. American Smelting and Refining Company Smelter (Garfield Smelter, Kennecott Utah Copper Smelter)
14. Garfield Acid Plants
15. Acid Storage Facility
16. Refinery
17. New Power Plant
18. Smelter Lagoon
19. Rail Grave Yard
20. Diving Board Tailings
21. Wastewater Treatment Plant Sludge Impoundments
22. Kennecott Tailings Pond Landfill
23. Smelter Landfills
24. Tailings Slurry-Pipeline
25. Concentrate Slurry Pipeline

Summary of EPA Proposed Listing Kennecott North and South Zones

EPA Source Name	Kennecott Site Number and Name	Problem Described in EPA Listing Package	Kennecott Actions at This Site
South Zone			
Bingham Canyon Mine	None. The mine is an active operating facility, not a hazardous waste site. The presence of metals is no surprise, given that the Bingham Mine is a world-class metal ore deposit.	Chromium, copper, lead, nickel, and selenium were detected in water in the mine. EPA hypothesizes a possible release of these substances to surface and ground waters, but provides no evidence to support this hypothesis.	Kennecott diverts storm waters around the mine, and collects seeps and springs within the mine for use in its process water system. The ultimate discharge of these waters to the environment at C-7 ditch (and ultimately to the Great Salt Lake) is controlled by a Federally delegated, State of Utah permit.
West Jordan Soils	9, Bingham Creek Tailings	Possible surface soil contamination with lead and arsenic from historic tailings deposits.	Kennecott participated with the EPA in 1991 to remove high concentration lead and arsenic contaminated soils from 51 residential yards. Kennecott placed these tailings in a specially constructed repository on its property in the Bluewater drainage.
State Motorcycle Park	17, Lark (State Motorcycle Park) Tailings	Metals in tailings may be released to surface or ground waters.	Kennecott completed the removal of the high lead and arsenic concentration tailings "hot spots" in 1993, and has completed covering the remaining low lead and arsenic concentration tailings with a soil cap. Final site reclamation is underway to restore the area as wildlife habitat.
Lark Tailings	16, Lark Waste Rock	EPA mistakenly identifies these Lark area waste rock piles as tailings. Metals in waste rock may be released to surface or ground waters.	Kennecott completed the removal of the waste rock in 1993, and is completing the final stage of site reclamation to return the area to wildlife habitat.
Butterfield Waste Rock	18, Butterfield Waste Rock	Metals in waste rock may be released to surface or ground waters.	Kennecott completed the removal of the waste rock in 1993, and is completing the final stage of site reclamation. Kennecott received a 1993 Earth Day award for this removal project from the Utah Division of Oil, Gas, and Mining.
Anaconda Tailings	Not a Kennecott site.	Metals in tailings may be released to ground water.	Kennecott is taking no action, since this site is the responsibility of others. ARCO, through their purchase of the Anaconda Company, owns both the tailings ponds and the land on which they are situated. ARCO is working with EPA to consolidate and place a cap over these tailings, which are located in the Bingham Creek channel.

Summary of EPA Proposed Listing Kennecott North and South Zones

EPA Source Name	Kennecott Site Number and Name	Problem Described in EPA Listing Package	Kennecott Actions at This Site
Small Bingham Creek Reservoir	12, Small Bingham Creek Reservoir	Metals and sulfate in leach and storm water may be released to surface or ground waters.	Kennecott cleaned the reservoir and completed construction of a sophisticated lining system in 1990 and 1991. This reservoir is operated under a Utah Ground Water Discharge Permit, and includes leak detection and ground water monitoring systems. There have been no violations of this permit.
Large Bingham Creek Reservoir	13, Large Bingham Creek Reservoir	Metals and sulfate in leach water may be released to surface or ground waters	Kennecott cleaned the sludges, tailings, and soils from the reservoir and is reconstructing the reservoir for process and storm water storage. The reservoir has been divided into three operating zones, and sophisticated lining systems have been constructed in two of the three zones. Lining of the third zone is scheduled for 1994. This reservoir is operated under a Utah Ground Water Discharge Permit, and includes leak detection and ground water monitoring systems. There have been no violations of this permit.
Leach Water Collection System (Process Water/Leachate)	14, Eastside Leach Water Collection System	Metals and sulfate in leach water may be released to surface or ground waters	Kennecott has completed improvements to surface and ground water cutoff structures in 11 of 24 drainages. Work is underway in the remaining drainages to control leach and storm waters. Kennecott has submitted a Ground Water Discharge Permit Application for this system to the Utah Division of Water Quality, and is awaiting issuance of the permit.
Waste Rock Disposal Areas	None. Kennecott considers the waste rock disposal to be part of its active operations. Leach water from the waste rock is managed by site number 14, Eastside Leach Water Collection System (see above)	Metals and sulfate in waste rock may be released to surface or ground waters	Kennecott has undertaken demonstration projects to examine the feasibility of various final reclamation techniques for the waste rock after the Bingham Mine reaches the end of its useful life (30 years).
South Jordan Evaporation Ponds	15, South Jordan Evaporation Ponds	Metals and sulfate in sediments may be released to surface or ground waters	Kennecott has completed verification sampling of the waste materials in the evaporation ponds, and plans to begin construction in the spring of 1994 to consolidate and cap these materials. The area will be reclaimed for wildlife habitat.

Summary of EPA Proposed Listing Kennecott North and South Zones

EPA Source Name	Kennecott Site Number and Name	Problem Described in EPA Listing Package	Kennecott Actions at This Site
Bingham Creek Tailings	9, Bingham Creek Tailings	Metals in tailings may be released to surface or ground waters	Despite the fact that neither Kennecott nor its predecessors ever mined or milled the lead/zinc/silver ores that generated tailings with high lead and arsenic concentrations, Kennecott has been cooperating with the EPA to remove these tailings. Removal of high lead and arsenic concentration tailings from residential areas has been completed. Additional tailings removal is planned for 1994. Kennecott is also co-funding a health study to determine if any adverse effects are associated with the former presence of these tailings.
North Zone			
Kennecott Tailings Impoundment	4, Kennecott Tailings Impoundment	Possible release of arsenic, chromium, copper, and lead to surface and ground waters from tailings impoundment	All surface water discharges from Kennecott's Tailings Impoundment are regulated by the State of Utah. Kennecott has submitted a Ground Water Discharge Permit Application to the State of Utah to protect ground water resources.
Magna Soils	6, Magna Soils	Copper above "background" concentrations in surface soils. Possible release of copper in the surface soils to ground waters	Copper values detected by EPA (average = 373 ppm, range of 234 - 573 ppm) are not hazardous, and there is no evidence that copper concentrations in ground water are elevated above background levels.
Refinery Evaporation Pond	20, Refinery Footprint	Possible release of arsenic, copper, and selenium to surface and ground waters from former evaporation pond	Kennecott discontinued the use of the evaporation pond once ground water problems were identified. Contaminated soils were excavated and recycled to the smelter to recover metals values. Additional source area investigations are in progress, and further ground water sampling will be conducted in the summer of 1994. A plan to address any residual ground water contamination will be prepared in 1994.
Smelter Slag Pile	1, Smelter Slag Pile	Possible release of arsenic, chromium, copper, lead, and zinc in slag to surface or ground waters.	Kennecott has removed material stockpiles from atop the slag pile, and has repeatedly tested the slag to determine the potential for metals leaching. Test results have consistently shown the slag to be innocuous.